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ABSTRACT

After being placed on the back burner during the 1980s, school finance is again a major issue. In the 1970s, reliance on property taxes created school district disparities because of unequal tax bases. Legislative reforms enacted between 1971 and 1985 had the following characteristics: school finance formulas were revamped; the state role in school, special needs, and urban district funding was increased; and limitations restricting local tax rate control were imposed. One major policy issue left unresolved concerns whether the problem of inequities was in tax base variation (solved by guaranteed tax bases) or in nonmandated per pupil spending. State funding increased from 40 percent to 47 percent during the 1970s and then by 3 percent during the 1980s. Litigation that occurred during the 1980s had three main characteristics: (1) some funding systems were found to be unconstitutional; (2) courts were more restrictive in fiscal disparity magnitudes; and (3) courts emphasized spending differences rather than just the differences between spending and wealth. Over the last two decades a healthy national economy and tax hikes have contributed to increased school funding. The main concern for the 1990s is deciding the best use to make of education revenues; this is best done by analyzing program tradeoffs, education as an investment, and effective allocation of revenue. Three inserts on Utah, California, and Arizona are included. They are: (1) "School Finance in Arizona," by Robert Stout; (2) "California School Finance," by Lawrence Picus; and (3) "Perspective on the Finance of Education in Utah," by Patrick Galvin. (EJS)

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The Changing Contours of School Finance

Allan Odden

Background

After taking a back seat to educational program reform during the 1980s, school finance has returned as a hot issue. Finance litigation, fiscal inequities, and finance reform have rebounded to high places on state education policy agendas. This policy brief discusses the changing contours of school finance through the 1970s and 1980s and outlines the key school finance issues for the 1990s.

Issues in the 1970s

School finance inequities derive from the way states finance public elementary and secondary schools. Nationally, local revenues still constitute a substantial portion (44 percent) of education revenues. Of the states in the Far West Laboratory region, only Arizona is close to the national average, with local revenues — primarily property taxes — accounting for 43 percent of the total. (See Table 1)

Heavy reliance on local property taxes produces fiscal inequities because the property tax base is not

distributed equally across school districts. As a result, some districts have a large property tax base, others a small one. In many states, this unequal ability to raise local revenues is substantial, varying by a factor of up to ten to one. Unfortunately, states typically implement programs that only reduce rather than eradicate the problem. As a result, revenues (from local and state sources) per pupil range considerably in most states, with the differences correlated directly with the local per pupil property tax base.

An actual or threatened court mandate led over 35 state legislatures to enact fundamental changes in their school finance structures between 1971 and 1985. These reforms had five major characteristics. *First*, they revamped the school finance formula, sending more state funds to property poor, lower spending districts. *Second*, they increased the overall state role in

funding schools. *Third*, they increased state funding for special needs student programs — state compensatory, special, and bilingual education programs. *Fourth*, the reforms often increased aid for the extraordinary needs of large, urban districts. *Fifth*, many reforms were accompanied by education tax and spending limitations that restricted local fiscal control over tax rates, and curbed annual increases in expenditures per pupil.

Unresolved Policy Issues. School finance court cases and subsequent finance policy reforms left two major policy issues unresolved: Was the problem variation in the tax base, i.e., in the ability to raise revenues? Or was the problem differences in spending per pupil?

If the problem is disparity in the local tax base, it can be remedied by enacting a Guaranteed Tax Base (GTB)

Table 1
Sources of Public School Revenues, 1986-87,
in Arizona, California, Nevada, and Utah¹

State	Federal	State	Local and Other
National Average	6.4%	49.8%	43.9%
Arizona	9.0	48.3	42.7
California	7.1	69.5	23.5
Nevada	4.4	39.5	56.0
Utah	6.1	54.4	39.6

¹ Source: National Center for Education Statistics, *Digest of Educational Statistics: 1989*; Washington, DC: U.S. Department of Education, 1989.

Far West Laboratory for Educational Research and Development serves the four-state region of Arizona, California, Nevada, and Utah, working with educators at all levels to plan and carry out school improvements. Part of our mission is to help state department staff, district superintendents, school principals, and classroom teachers keep abreast of the best current thinking and practice.

Table 2
Percent Revenues by Source for U.S.
K-12 Public Education
1960 to 1988²

Governmental Level	1960	1970	1980	1988
Federal	4.4%	8.0%	9.8%	6.3%
State	39.1	39.9	46.8	49.5
Local and Other	56.5	52.1	43.4	44.1

² Source: National Center for Education Statistics, *Digest of Educational Statistics*; 1989. Washington, DC: U.S. Department of Education, 1989; and National Center for Education Statistics, *Public Elementary and Secondary State Aggregate Nonfiscal Data, by State, for School Year 1988-1989; and School Revenues and Current Expenditures for Fiscal Year 1988*. Washington, DC: U.S. Department of Education, 1990.

Program (or district power equalizing programs) in which all districts can function as if they had the tax base guaranteed by the state. All districts then, rich or poor, would raise the same amount of money per pupil by levying the same tax rate. But GTB Programs let local districts decide how high a tax rate to levy. Different tax rates produce different expenditures per pupil. Thus, *GTB programs allow for spending differences*, but differences are related to tax effort, not local property wealth.

If the school finance problem is defined as differences in spending per pupil — whether due to differences in tax bases or differences in local preference for education — the remedy is a school finance system that mandates equal spending across all school districts (with appropriate adjustments for different pupil needs and different education prices). Examples are California's and Hawaii's systems.

The Complexity of the Problem. This lack of clarity about the nature of the problem has plagued school finance for decades. States need to decide whether their goal is equal access to raising local revenue or equality in expenditures per pupil.

State response to school finance court mandates during the 1970s reflected indecision over these two goals. Most studies of the impact of school finance reform found only modest changes in either per pupil spending disparities or dependence on local property wealth.

The clearest school finance trend in the 1970s was change in sources of school revenues. Local revenues dropped from over 50 percent of total revenues in 1970 to 43.4 percent in 1980, while state revenues rose from about 40 to 47 percent. (See Table 2)

Issues in the 1980s

School finance did not change much during the 1980s. As Table 2 shows, sources of education revenues at the end of the 1980s were about the same as at the beginning though state sources rose a bit, to almost 50 percent, and federal sources dropped somewhat.

One surprise of 1980s was a new kind of school finance litigation. While litigation was light at the beginning of the decade, by its end court cases were filed or pending in nearly 20 states. The recent Texas and New Jersey cases represented a "second round" of litigation, each state having experienced a court suit during the 1970s as

well. Finally, major new directions were set by the school finance case in Kentucky, which not only overturned the state's school finance system, but also overturned the state's entire education system.

Three aspects of 1980s school finance litigation are worth noting. *First*, courts are not averse to rendering a "second decision." Indeed, even during the 1970s, courts in Connecticut and Washington found systems unconstitutional in a second case. *Second*, courts may be becoming more restrictive in the magnitudes of fiscal disparities allowed. In both the Kentucky and Texas cases, the vast majority of districts spent close to the state average. The systems were overturned, in part, because of the larger disparities between the lowest and the highest spending districts. *Third*, there seems to be a developing trend to focus more on spending differences per se, rather than on just the relationship between spending and wealth. The balance may be tipping towards requiring equal expenditures per pupil (again, with legitimate adjustments for pupil need and education price differences) rather than just requiring equal access to a local property tax base.

Concerns for the 1990s

One concern is the likely level of revenues that will be available. Another is intense interest in increasing the productivity of dollars spent on public elementary and secondary schools. A third concern centers on the many and complicated school finance issues raised by the evolving education reform agenda.

Level of Revenues Available. One of the enduring features of elementary and secondary education finance is that each decade, revenues per pupil rise substantially in nominal and real terms. Nationally, current expenditures per pupil, adjusted for inflation, increased by 70 percent between 1960 and 1970, by another 35 percent between 1970 and 1980, and again by another 30 percent between 1980 and

1990. Whether enrollments rise or fall, whether the "external threat" is defense or international economic competition, U.S. school funding rises in real terms.

Sources of Revenue Growth. The obvious question becomes: what was the source of this revenue growth? The answer is twofold: 1) a healthy national economy which produces natural increases in tax revenues and 2) tax rate increases. Though some had suggested that education reform produced the real education revenue increases during the 1980s, recent research found that economic growth was the primary variable.

In addition to a growing economy, *hikes in tax rates* played a role at the state and local district level. (This despite major declines in national tax rates in the 1980s, particularly income tax rates.) At the state level, increased sales tax rates were the most popular strategy. States such as Arkansas, Florida, South Carolina, Tennessee, Texas, and Utah all raised the sales tax rate and generally used the proceeds to help fund major education reforms.

Non-broadly-based tax sources. New education revenues from sources other than income, sales and property taxes were tried in some states and local school districts but produced only small amounts of funding. Several states have enacted lotteries in the past decade. But lotteries are very inefficient revenue raisers and generally produce only small amounts of new revenue compared to the total amount of money needed to fund education.

Dedicated revenue sources. Under this strategy for producing education revenues, states "dedicate" a revenue source (such as the sales tax) or a tax rate increase (such as the one cent sales tax increase in Arkansas and South Carolina) or even a portion of the state general budget (such as California's Proposition 98) to education. The theory is that dedication will insure more money for the schools. The short conclusion is that dedicating tax

resources for education or any other function does not work. There are simply too many legislative ways around dedication requirements.

The Best Use of Education Revenues in the 1990s

Given the fiscal history of the past 40 years, the policy question may be how to use substantially — not just marginally — increased education dollars. In addition to reducing traditional school finance inequities, answering this question in a way that markedly improves student achievement and the productivity of a state's public education system is the key school finance agenda for the 1990s.

Deciding how best to use new educational resources can be approached in three major ways: 1) assessing education generally as an investment strategy; 2) analyzing the tradeoffs between prevention and remediation programs; and 3) identifying the effectiveness of traditional uses of education dollars such as consolidation and class size, as well as curriculum coverage, use of time, and new ways to organize schools and classrooms.

1. Education as an Investment Strategy. Research shows that both private (individual) and social (governmental) rates of return on investments in education are sizable, ranking with other conservative or governmental investment opportunities. Education is a good investment, both for governments and individuals.

2. Tradeoff Between Prevention and Remediation. There is widespread consensus that programs designed to prevent school failure or enhance school success, especially for poor children, are good public investments. Research shows that preschool programs for poor children have long-term benefits and are highly cost effective. Even when future benefits are discounted to present values, investments in comprehensive, early

childhood programs for poor four-year-olds have benefit cost ratios of up to six-to-one.

Research also shows that extended day kindergarten, i.e., full day kindergarten for poor children, helps students perform adequately in subsequent elementary grades. In fact, extended day kindergarten can help students increase their school performance by up to half a standard deviation on achievement tests. Fully funding both pre-school and extended day kindergarten for poor children would substantially help "deliver" on the national goal of insuring that all students start school ready to learn.

Dropout prevention programs are also cost effective. While benefit-cost ratios are lower than for prevention programs, even late remediation programs clearly "pay off" in the long term. *So it is smarter to invest in prevention programs, but also wise to invest in remediation programs that work.*

3. More effective ways of allocating educational dollars. While the general education production function literature has been inconclusive, several findings point to ways to save money. Other research on educational intervention effects identifies programs where investment will bolster student performance.

The conventional conclusion from most educational production function research is that few educational resources are consistently related to student performance. Moreover, higher educational expenditures are rarely related to increased student performance. *The important message from this research is that if additional education revenues are spent in the same way as current monies, student performance increases are unlikely.* New revenues need to support new strategies in order to produce significant student achievement gains. The message is not that money doesn't matter. But the way money makes a critical difference.

Teacher Salaries. Higher beginning salaries will help recruit talented individuals into teaching. A compensation structure that pays for professional expertise is one that rewards the use of effective teaching strategies and indirectly rewards experience. The longer a professionally-oriented individual is in teaching, especially in effective schools, the greater the professional expertise that person develops.

Scale economies. Many education policymakers believe that larger school districts and larger schools are more cost effective than smaller districts and schools. The research generally concludes that economy of scale is an unresolved issue for school districts and rarely can be documented for elementary or secondary schools above 400 students! The implication is to skirt consolidation except for very tiny schools, and certainly to avoid creating large schools with enrollments over 1000, even at the high school level. The scale economies research show that smaller is better (though tiny is not).

Class size. Another tenet of U.S. education is that small classes produce higher achievement and greater teacher satisfaction. Smaller classes are an expensive policy option. A late 1970s meta-analysis of class size and student achievement concluded that class size below 20, and especially down to 15, produces significant gains in student performance. However, this review did not include any studies on the impact of class size reduction over a number of years. It is inaccurate to assume that the impact of a one year class size reduction can simply be multiplied by a number of years to indicate the long-term effect.

New research findings conclude that the evidence for small class size only supports one-to-one or small group (up to three students) tutoring. These findings argue that one-to-one tutoring in grades one and two can keep children in these grades performing at grade level. In short, the

research on class size and student achievement primarily supports very small group tutoring, especially for students in the early grades.

Time and curriculum. Many 1980s education reform reports called for extending the school day and year; few states have done so. Such reforms are expensive. Since the school year is about 180 days in most states, it would take a 40 percent increase to extend it to 200 days and another 10 percent to extend it to 220 days — the norm in many other countries. The costs, roughly, would equal 10 to 20 percent of current expenditures, or between \$20 and \$40 billion.

Research analyzing differences in achievement across countries shows that time variables, such as the length of the school day and year, are insignificant and that the content of the curriculum is the key determinant of achievement differences. These studies suggest that U.S. student achievement would be much better if the curriculum were restructured to cover more topics and concepts and to focus on problem solving rather than basic skills. Implementing such major curriculum reforms — as, for example, California is doing under its new curriculum frameworks — should be one of the highest education priorities for the 1990s.

Student Promotions. Another "time" policy proposal in the U.S. has been to eliminate "social promotions." But research is also quite conclusive that this strategy does not work. The cost of holding children back is high: it is equivalent to providing an entire extra year of school. A much cheaper and more cost-effective policy would be to promote them and provide supportive assistance.

Allocation of Time. A large body of research shows that the higher the student academic learning time (the amount of time allocated for instruction during which the student is engaged at high success levels), the higher the learning. This conclusion

suggests that major curriculum restructuring combined with wider use of effective teaching practices — within current school time allocations — would produce impressive gains in system performance. These policy changes, moreover, are relatively low cost.

Peer tutoring, adult tutoring, cooperative learning — all generally low cost — also are likely to produce improvements in student achievement.

Peer tutoring means that students, usually older students, tutor usually younger students in academic subject areas. This type of program requires organizational mechanisms at the school level to facilitate implementation. Some initial staff training is needed in how to structure the program and help students play the tutor roles.

Adult tutoring is similar to peer tutoring except that adults, with modest amounts of training, perform the tutoring function. A comparison of several programmatic interventions found that both peer and adult tutoring were more cost effective than extending the school day, lowering class size, or computer-assisted instruction.

Cooperative learning is another classroom organizational strategy that produces large gains in student performance. Cooperative learning entails heterogeneous groups of students (with both high and low achieving students in each group) working together on tasks. Research shows that achievement improves for all students, both high and low achievers.

Finance Dimensions of Three New Education Reform Types

Education finance has evolved toward the use of three major policy instruments: 1) fiscal capacity equalization formulas that have been used for over 80 years; 2) categorical

programs for special pupil and district needs that expanded in the 1970s and 1980s; and 3) school-based incentive programs introduced during the 1980s education reforms.

There are more effective strategies, however. Three that policymakers should consider are: formula incentives; new teacher salary incentives; and choice incentives.

1. FORMULA INCENTIVES.

(A) *Intergovernmental grant theory* can be used to design or analyze incentives within the formulas states use to distribute funds to districts and schools. Formulas can be designed to require local financial matching; regulations can be developed to target funds to students or programs; formulas can stimulate extra funding or simply replace local money with state money. A fresh analysis of that formula design could stimulate local reform and increase the productive impact of new education resources in the 1990s.

(B) *School-based fiscal incentives* pose different issues. This approach is not on individually focused incentives but incentives for operational units (production divisions, or departments — schools or academic departments are the education analog). Instead of linking incentives to the productivity of the entire firm, individual units are rewarded on the basis of their performance over a multiple year time period. Yet there can be problems. Individual incentive plans can work against the kind of team effort required to develop and sustain a productive organizational climate. Several states, including South Carolina, Pennsylvania, and Utah, have tried different forms of school incentives. Many design issues must be addressed, including: dollar amount, criteria, how allocated, restrictions on use, and time period to qualify are a few. States need to learn more about how these programs work and seriously consider developing a range of school incentive mechanisms.

(C) *New budget incentives* are being adapted from business, where there has been a 20 year trend toward granting local managers greater financial discretion in exchange for more explicit accountability on outcomes. Rather than simply telling local school managers how to spend money, school revenue providers are now trying to create incentives for local managers to use their local knowledge to accomplish system goals in accomplishing system goals.

Under the "old system", revenue providers maximized preferences by instituting resource distribution rules when allocating resources to local managers. For example, the rule might be one high school counselor for every X number of students. Under the "new system", resource providers identify desired outcomes and provide lump sum budgets, but let local managers decide how to deploy those resources. This approach to budgeting goes by many names: site-based management, school-based management, or responsibility or — in higher education — revenue center management.

2. NEW TEACHER SALARY STRUCTURES.

Another potentially costly, yet very important use of education dollars is teacher salaries. The U.S. has given teacher policies considerable attention over the past five years and several ways to transform teaching into a full profession have been proposed. But the costs of these proposals are high, approaching an extra 26 percent in real U.S. dollars. Moreover, the actual teacher compensation structure has not been given much analytic discussion.

Another problem is that many programs for recruiting and retaining able individuals in teaching, such as *loan forgiveness programs*, have been ineffective. On the other hand, *fellowship programs with service paybacks* are effective recruitment strategies. These programs, which defray college costs, provide an immediate benefit and are successful recruiting devices.

As noted earlier, beginning salaries are also a factor in recruitment. Research shows that higher beginning salaries are effective in attracting more — and more talented — individuals into the profession.

Thus, raising beginning teacher salaries is a productive policy goal. But, the policy issue for the 1990s is whether there is a target for beginning teacher salaries. Should beginning teacher salaries simply be as high as possible, or should they be equivalent to beginning salaries for individuals with a BA degree?

Most new teacher policy proposals suggest that all teachers, especially in grades K-8, should have a solid liberal arts education. These proposals also suggest that advanced technical knowledge is not the critical teacher ingredient, again at least for grades K-8. A broad education in the liberal arts, with either a humanities or mathematics/science concentration is what is needed. By implication, then, beginning teacher salaries should be equivalent to beginning salaries for individuals with a BA degree, putting teaching on an equal beginning salaries basis in recruiting individuals.

An overhaul in the design of the teaching profession's compensation structure is needed. The traditional practice of giving salary increments for education and experience is not the best way to reward or retain outstanding teachers. Research has shown that these teacher characteristics are not strongly related to system productivity.

The preferred approach to teacher salary structures is to pay for professional expertise — content knowledge, pedagogical expertise, and proof of knowing when to apply different teaching strategies. Developing professional expertise requires collegial interactions within schools, and research (in education and other fields) show that "worker" participation in technical decision making improves system productivity. Collegial interactions over the

"business of teaching and learning" help engender continual development of professional expertise which leads to improved student achievement, teacher satisfaction, and teacher decisions to remain in teaching.

3. SCHOOLS OF CHOICE.

Another major new policy initiative is school choice, allowing students (or parents of grade K-8 students) to choose which public school to attend. This policy shifts the attendance decision from the school system to the parent or the child.

The financing of public school choice, however, has received little attention. The key funding issue pertains to the decentralized nature of the country's school structures (i.e., how much money will a student carry in attending a school outside the district of residence?). The problem concerns the mismatch between a district-based funding structure and a school-based attendance policy. To remedy this mismatch, a new, two-tiered funding system may be appropriate. The state would provide all districts with adequate revenues to deliver a quality base education program. In contrast with the current system, districts would be prohibited from spending above the base, and local fiscal control would revert to schools. Each school would be allowed to enact an income surcharge, with the per pupil yield set by the state at a higher level than the amount of revenue raised at any school. This approach begins to place a small "price" choice, because parents of all children attending any school would be subject to the income surcharge.

This new funding approach would need to be attached to some state (or federal) tax, preferably the income tax that shelters the poor, and a per pupil yield schedule backed by the state (or federal) government, so that all schools with a similar surcharge would receive the same amount of extra revenues per pupil.

Conclusion

School finance cannot afford to stay dormant in the 1990s as it did in the 1980s. States need to address many new school finance issues. Key among them is how to invest and reallocate resources to meet ambitious state and national goals of bringing all students up to adequate performance levels. To accomplish this, school finance in the 1990s must push beyond fiscal inequities and determine connections among student outcomes, education programs, and education funding. School finance may have "ducked" those issues in the past, but cannot afford to do so in the future.

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School Finance In Arizona

Robert T. Stout

School finance policy in Arizona does not have a significantly different history from that described in the *Changing Contours of School Finance Policy Brief*. Under threat of litigation, and in response to increasing concern by policymakers, and a threatened tax payer revolt, the Arizona legislature revamped the school finance system in 1980.

The restructured finance system was a foundation system incorporating various weights for categories of "need" (the increased numbers of senior teachers, the rapidity of growth or decline, the numbers of students with special needs and their types) and a revenue/expenditure cap. The system was designed to equalize expenditure and effort, with the state as the primary equalizing force. Since 1980, the state's share of school budgets has increased significantly.

The Present Debate

While originally thought to be a responsible and responsive restructuring of both financial burdens and benefits, the 1980 plan is the focus of increasingly intense debate among policymakers, state officials, and school district officials. The intensity of the debate has prompted a threatened law suit, and lies behind the actions of the Arizona Citizens for Education (ACE).

Although the issues are quite complex, two sources of friction are 1) a general tension over funding adequacy, and 2) difficulty in the original school finance formula.

Arizona has a long history of fiscal conservatism and resistance to state intervention in local or individual matters. Although the numbers are routinely in dispute, Arizona does not have a history of providing high levels of support for public and social services. Consequently, provision of social services for children (including schools) has not been high. Since 1970, Arizona has become more urban in character, has grown rapidly, and has

seen the immigration of much more diverse populations with much wider ranges of need. Arizona has experienced its own forms of child abuse, adolescent suicide and pregnancies, high school drop out rates, and other forms of social dysfunction.

School district officials have complained repeatedly that funding is too low to allow them to meet the increasing needs of the changing school-age population. Many policymakers have responded that Arizona is not wealthy, that school districts receive hefty support already, that schools are not as efficient as they could be, and that schools must show evidence of improvement before additional funds are made available. In addition, policymakers argue that in difficult economic times schools must learn to compete with other social services for limited state funds. This second argument has increased the intensity of the debate with school officials. Relatively, the state's expenditures for K-12 schooling has decreased. The percent of the state's budget dedicated to schools has gone down significantly since 1980. Arizona policymakers have had to juggle education claims against claims for health care and increased benefits for the poor, new roads, additional prisons, and a host of others. The rapidly increasing population and their increased needs have not necessarily produced equal revenue sources for the state.

Against the backdrop of perceived insufficiency in school funding, school officials and others have also encountered difficulty in the original school finance formula. The foundation program, as passed, was designed to accomplish three things: 1) to recognize differential property wealth among school districts, 2) to attempt to equalize tax burdens among school districts, and 3) to provide a base for meeting the educational needs of children.

The chosen strategy was to develop a complex funding formula which established base expenditures for a nominal "average" student (FTE), and to add funds for students with special needs. At the core, the formula was designed to provide basic funds for regular operations and additional funds for educating children who were thought to require extra services.

In the last ten years, the formula has been changed often in response to generally increasing costs (inflation) and in response to arguments that the level of funding for children with special needs was too low. Thus, legislative energy has gone to adjusting the base funding formula, often leaving educators dissatisfied with the outcome.

But the base formula has not been a sufficient vehicle for dealing with swift changes in the political and demographic forces of Arizona. Four major issues have led to multiple adjustments in the financing plan: 1) rapid growth and decline; 2) the needs of urban school districts; 3) escalating costs for certain functions; and 4) funds for special improvement efforts. These demands on the finance system have created a very complex web of funding tactics.

Rapid Growth and Decline

Because the base formula is driven by student count, it is one year behind reality. This means that some very rapidly growing districts are continually underfunded. Further, the formula provides that thresholds must be met in order to qualify for "rapid growth" funds, but officials in rapidly growing school districts argue that the funds come too late and in too small amounts to allow them to provide even basic services. State officials counter that more precise planning in the local districts would allow them to anticipate needs and provide for them. School districts with declining enrollments argue that programs cannot be downsized in a piecemeal fashion; one

cannot, for example lay off one-half of a physics teacher if the number of students in a physics course drops from 26 to 17.

A second debate centers on student count. The issues are when to count, and how to handle absences. Urban districts, particularly, press for leniency. They argue that urban students drift in and out of school, often changing school districts several times in a year, or showing up long after the school year has started. In addition, urban students have high rates of absence which cannot be controlled by the school. Nonetheless, urban educators stress, the basic program has to be sustained, even if large numbers of students are absent or are in transition. However, state officials argue that state funds should not be allocated for students who are not there.

A third debate is over school facilities. Rapidly growing districts state that the finance plan does not provide sufficient revenues to build schools fast enough. Yet, districts with declining enrollment argue that empty school buildings still generate costs, and that they should be allowed to dispose of those buildings without penalty.

All of these issues are continually being addressed by the legislature.

The Needs of Urban Districts

Urban districts feel the legislature has been unsympathetic to their costs of education. They argue that the finance scheme assumes the nominally "average" student and does not sufficiently fund the multiple and high-cost needs of their students. They argue 1) the finance plan prevents them from using their high property wealth even if they could convince voters to raise taxes, 2) the multiplier weights for students with special needs are too low, and 3) the costs of all sorts of goods and services are disproportionately high in urban areas.

Excess Costs for Certain Services

State school districts have said that the basic inflation index which is used to determine the base costs of education in ensuing years fails to account for excess costs in certain goods and

services. They cite examples of relative hyper-inflation in transportation and utility costs especially.

Reform and Improvement

As the State has moved to raise standards, school district officials have argued that state policymakers are mandating extra cost services without providing additional funding. For example, as students are required to complete more courses, or to take more academic work, schools are forced to provide classes they might not have offered previously. They argue that such mandated shifts in student interest produce extra costs and major dislocations in personnel utilization. A current example is a requirement that school districts must offer foreign language instruction in the elementary grades. School officials ask where they will find funds to implement the mandate? Other examples include provision for increased services for at-risk students and for pre-school children with handicaps, and implementation of substance abuse programs. While school officials agree that such efforts are worthwhile, they argue that such efforts have to be funded adequately to be effective.

Legislative Strategies

State policymakers have adopted four basic strategies to find resolution for these continuing debates. The first, already mentioned, has been to adjust the base formula from year to year, attempting to relieve pressure as it builds in one area after another.

The second has been to provide additional funds for various special-purpose efforts. Thus, some money was made available to fund special efforts for at-risk students. But the funds were not sufficient to go to all districts, necessitating a formula for deciding which districts were eligible.

The third has been to create pilot programs in areas of legislative interest. Policymakers, wishing to have implemented one form or another of school improvement, have allowed districts to apply to be included in the effort. If the district is successful in becoming a pilot district, the district is given permission to raise local taxes in

order to fund the pilot program. Recent examples of this strategy are the Career Ladder Program for teachers and an emerging effort in school restructuring.

The fourth has been to insist that school districts become more efficient. Policymakers argue that school officials could do more to reduce unnecessary costs, to reallocate funds to meet new demands, and to be much more competent in their planning.

Current Status and Future Issues

In November, 1990, the citizens of Arizona will vote on a resolution put forward by the Arizona Citizens for Education (ACE). The proposition calls for a systematic rise in the base funding formula over the next ten years. Legislators and other state officials are split over this proposition, some favoring it and some opposing it actively. If passed, many school officials see hope that school funding will come closer to meeting student needs.

Also; the County Superintendent of Schools in Pinal County has been seeking school districts throughout the State to join in a law suit. Working with the Arizona Center for Law in the Public Interest and the Southern Arizona Legal Aid Society, the cooperating school districts may file suit to attempt to overturn the current funding plan. Their goal is to have 100 of the 220 school districts in the state join in the suit.

Conclusion

Pressure in Arizona for revamping school finance has been especially intense in the past six or so years. For various reasons (lack of state revenue is cited most often) the state legislature has moved with caution. Legislators have responded to pressure and have made adjustments. However, the fact remains that Arizona continues to be a relatively low-spending state for education, citizen and school administrator unrest continues to be high, and disparities in funding among school districts continue to surface.

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California School Finance

Lawrence O. Picus

Background

The current system for funding California's public schools is a mixture of revenue limits, general aid to school districts, and special, or categorical, funding programs. It cost over \$23 billion to educate the nearly five million K-12 students in California schools in 1989-90. Distributing the fiscal resources available for education to schools is a complex task. Although the money is allocated and directly controlled by the State, responsibility for developing educational programs lies with the individual school districts. To make matters more problematic, policymakers continue to grapple with the state's changing demographics, tremendous enrollment growth, and limitations on funding for public services.

Nowhere are the changing demographics more obvious than in schools. Nearly 25 percent of California's school children live in poverty; over 600,000 have limited English speaking ability; and 20 percent live in single parent households. School enrollments should grow by 180,000 students in each of the next five years, costing the state an additional \$832 million dollars per year. If adjusted for a 4.5 percent inflation rate, the cost rises to \$2 billion just to stay even. Moreover, 46,000 more teachers and 2,100 more schools will be needed.

School Funding History

The history of California school finance is dominated by the following four events.

1. Serrano v. Priest. In 1971, the State Supreme Court ruled that the state's system of public school finance did not meet the equal protection clause of the California and United States Constitution, and that the state's finance system discriminated against the poor because it made the quality of a child's education a function of the wealth of his parents and neighbors. The case was remanded to the lower courts for trial. Three years later, the court ruled that revenue disparities

among districts in spending for basic educational services had to be reduced to "less than \$100 per pupil."

However, before the court's ruling, the Legislature passed Senate Bill 90 which implemented for the first time revenue limits. Revenue limit determined how much money a district had available for basic education programs, and was based on the district's revenues in the 1972-73 school year. To equalize district revenues, a variable growth rate or "squeeze factor" was established. High spending districts were restricted to lower annual revenue increases than were low spending districts. Over time, this squeeze factor was expected to equalize district spending.

However, SB 90 did not go far enough in reducing spending inequities, and further remedies were ordered. In 1977, the Legislature passed AB 65 with the intent to achieve "substantial compliance" with the Serrano requirements. However, before its implementation, Proposition 13 was passed.

2. Proposition 13 and the Gann Spending Limit. The years following passage of Props 13 and 4 were lean years in California. In 1978, voters approved the Jarvis-Gann tax limitation initiative, known as Proposition 13. Prop 13 limited property taxes to one percent of the 1975-76 assessed market value; limited assessment increases to no more than two percent a year; allowed property to be reappraised only when it is sold or ownership is transferred; prohibited state and local governments from passing new property taxes; and required a two-thirds vote of the Legislature to enact changes in state taxes.

Since there was little time to plan for the 60 percent reduction in property taxes that Prop 13 would bring, the Legislature passed SB 154, the "bail out" bill, which guaranteed school districts between 85 and 91 percent of their previous years' revenue. Thus, for the first time, the burden of financing education was placed on the state. Local residents

and school boards no longer decided how much to spend on education, and state planners could no longer count on growing assessed values to fund a portion of the state's programs.

Following SB 154, the legislature passed AB 8; the general framework under which schools continue to be funded. Under AB 8, district revenue limits were maintained, but the legislature decides what share of the one percent property tax collections are to be given to the schools. The state then contributes the difference between each district's revenue limit and the amount of property taxes it collects.

In 1979, voters passed Proposition 4, the Gann spending limitation. This measure limits growth in spending to the rate of increase in the state's population and the lower of the U.S. Consumer Price Index or California Personal Income and requires that any surplus be returned to the taxpayers. The state also became responsible for determining how much school districts could spend, and it faced a two-thirds vote requirement to raise taxes. The limited revenue generated for education did not change until the passage of SB 813.

3. Senate Bill 813. In 1983, California, responding to the reform challenges in *A Nation At Risk*, passed Senate Bill 813. SB 813 provided an additional \$1 billion a year for schools during each of the next four years; enacted a number of important educational reforms; and established many new programs. Crucial in the bill's passage was the explicit agreement among legislators that schools would not receive more money unless school reform measures were also enacted. Among the programs created were increased high school graduation requirements, a mentor teacher program, funds for instructional materials at the high school level, and a program for tenth grade counseling. In addition, financial incentives to increase the length of the school day and school year, and to increase beginning teacher salaries were offered and widely accepted by school districts.

In 1984, voters approved the California State Lottery whereby a minimum of 34 percent of total lottery receipts must be distributed to public schools and colleges. The Lottery provides approximately \$1 billion a year in revenue. Although the measure requires that these funds "supplement not supplant" support for education, policymakers and educators argued that education's share of the State's General Fund Budget declined due to the availability of Lottery receipts by school districts. To remedy this situation, the education community mobilized to secure passage of Proposition 98 in November, 1988.

4. Proposition 98 has three major provisions: 1) a formula establishing a minimum funding level for K-14 education; 2) a Gann limit excess formula requiring revenues received by the state in excess of the Gann spending limit be allocated to K-14 education on the basis of equal dollars per ADA, up to a maximum amount of four percent of the prior year base funding level; and 3) the requirement that every school agency adopt a "School Accountability Report Card" annually, beginning in 1989-90.

Minimum funding level: This provision requires that K-14 education receives at least 40.879 percent of the State general fund revenues each year, the same percentage appropriated in 1986-87 (Test 1), or at least the same amount of combined State aid and local tax dollars as was received in the prior year adjusted for state-wide ADA (Average Daily Attendance) growth and inflation using the same inflation measure as used to calculate the Gann spending limit (Test 2).

A Gann limit excess formula: Expenditure of the Gann excess revenues are restricted to five areas of "improvement and accountability:" 1) class size reduction to not more than 20 students per teacher and a total teacher load of less than 100 students per teacher; 2) instructional supplies, equipment or materials; 3) direct services to students to ensure academic progress; 4) staff development programs designed primarily by classroom teachers; and 5) teacher compensation.

Problems with Proposition 98

Although spending increased by over \$1.6 billion between 1988-89 and 1989-90, real expenditures per ADA actually declined by one-half of one percent. Worse, Prop 98's minimum guarantee became a ceiling for school funding as the Legislature, faced with spending demands from a range of state programs, was unwilling to give the schools any more than the minimum entitlement. The Prop 98 funding guarantee also meant that if the State wanted to raise taxes for spending on a non-education program, it would have to raise almost \$1.7 for every \$1 it wanted to spend on other programs.

These problems were exacerbated by the Proposition's two-test approach. To resolve this problem, Proposition 111 was passed by the voters in 1990. This measure includes: 1) a nine cent per gallon increase in gasoline taxes; 2) changing the way the Gann limits are calculated; 3) modification of Proposition 98 so that education receives only 50 percent of future Gann excess revenues; and 4) modifications of the Test 1 guarantee of 40.897 percent by allowing temporary adjustments in years of very slow or very rapid state revenue growth. At this time, the full impact of Prop 111 is not yet known.

California in the 1990s

California could face a \$3.6 billion revenue shortfall. This has serious implications for all state services, particularly education. Before the full extent of the revenue shortfall was known, Governor Deukmejian had proposed limiting school district COLAs to three percent, substantially below the 4.5 to 4.8 percent required by statute. Districts anticipating difficult financial times with a 4.5 percent COLA will be forced to make substantial reductions in services if the three percent COLA remains in effect. Moreover, the passage of Prop 111, will allow the state to reduce funding for education slightly if necessary, something that would not have been possible under Prop 98's Test 2.

Categorical Funding. California provided \$4 billion in 1989-90 to fund categorical programs. In addition, in 1989-90, \$180 million was appropriated as supplemental grants for districts that

do not receive large amounts of categorical aid. This grant program, established at the behest of legislators from suburban and rural districts who claimed that their school districts did not receive their "fair-share" of categorical assistance due to Prop 98, is in jeopardy with the new, lower, state revenue estimates.

Facilities. Prop 13 made it impossible for school districts to levy property taxes to pay for bonded indebtedness. Between 1978 and 1986, school districts relied entirely on the state's lease-purchase program to construct new facilities.

Voter approval for bond issues to build new facilities requires a two-thirds majority. Since 1987, there have been 76 elections, 39 were successful. However, currently, there is a backlog of approximately \$6 billion in approved construction projects. The voters approved \$1.6 billion in state general obligation bonds in 1988, but these funds have already been allocated. Another \$800 million in school construction bonds was approved in June, 1990, and the November, 1990 ballot will contain a similar \$800 million measure. Even this infusion of an additional \$1.6 billion will not solve the state's long term school construction needs.

Districts also have the authority to levy fees on developers for new construction, but these fees have not been adequate to meet all construction needs. As a result, districts are forced to rely on the state's lease purchase program.

Summary

The education of California's five million school age children is expensive and important. Providing adequate financial resources to the state's 1,010 school districts is difficult, fraught with political and educational complexities, particularly in a state with a proven reluctance to increase taxes. How the state's policymakers face this challenge is important in determining California's future.

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Perspective on the Finance of Education in Utah

Patrick Galvin

Public school education in Utah operates with the lowest per pupil expenditure while housing the highest number of students per classroom in the nation. In 1988, the average per pupil expenditure was \$2655 compared to a national average of \$4509 per pupil. Several factors account for this wide discrepancy: a high birth rate, a sluggish state economy, and a reluctance by taxpayers to assume a heavier tax burden.

The 1990s promise an opportunity for increasing Utah's per pupil expenditure for education because of declining student enrollment and a strengthening state economy. Despite these projections, when Utah's demographic characteristics are considered in conjunction with its relatively weak economic base (and consequent tax burden), the discrepancy between Utah's need and its capacity to raise necessary educational revenues becomes apparent.

This policy insert addresses three fundamental policy questions: 1) What are the prospects of increasing education revenues in Utah during the 1990s? 2) What do these low per pupil expenditures mean for the quality of education in Utah? 3) How have these fiscal constraints affected the distribution of resources among Utah's 40 school districts?

Demographics versus money

Demographics and money are two factors that contribute to Utah's educational funding problems. During the 1980s, Utah's birth rate was *nearly twice* the national average of 1.0 percent. Utah ranks *second* among the states in the percent of population under five years of age, *first* in the percent of population between five and 17 years of age, and *first* in the number of students per classroom (23 students per classroom). Utah schools serve a large number of students relative to the state's total population. Between 1978 and 1988, the public school enrollment *increased* by 32 percent while in the nation, enrollment

declined by six percent (Utah Foundation, December, 1989). In fact, the Utah Research Foundation, a non-profit agency established to study state and local government, reported that during the 1988-89 school year there were 254 public school students per 1,000 population in Utah, a ratio that was 55 percent *higher* than the U.S. average of 164 enrolled students per 1,000 population.

Utah's comparatively weak economic base makes financing public education problematic. Utah ranks *last* in the nation in the amount of personal annual income available per enrolled student: the total personal income per enrolled pupil in Utah is only \$47,967, compared with \$100,590 in the United States and an average of \$75,710 in the eight neighboring Mountain States. Because of the state's limited fiscal capacity, the tax burden on its working population for funding education is substantial, ranking *sixth* in the nation in 1988: state and local revenues devoted to public education were equal to \$54.36 per \$1,000 personal income compared to an average of \$42.80 per \$1,000 throughout the United States.

Increasing Educational Revenues

Revenues for public education are acquired from property, sales, income, and mineral lease taxes as well as from tuition, fees, and Federal sources. The extensive reliance on multiple tax sources does not make it easy to identify new sources of education revenue. Lotteries are not likely to be accepted in Utah with its largely Mormon population. Programs, such as those promoting business-school partnerships, may succeed in wealthy, urban settings, but it is *less* obvious how such programs will succeed in the more sparsely settled, poorer regions of the state. *Uncertainty* about how such revenues would be distributed among districts — or among schools within a district — raises questions about how these private dollars will serve the public need equitably. Thus, for Utah the most likely way education rev-

enues will increase is through continued economic growth.

Currently, Utah is enjoying an economic recovery. Between the 1988-1989 fiscal year, more than 60,000 new jobs were created, and both retail and housing sales improved. One of the benefits of this recovery is increased revenues, providing the state with a surplus. This surplus enabled the legislature, for the 1990-91 fiscal year, to authorize \$175.4 million, the largest single, one-time increase for educational funding for higher and K-12 education in history.

The increased investment in education reflects policymakers' concern over the quality of education in Utah. There is, however, an urgency to the situation. In September, 1989, Utah's teachers walked out of their classrooms for one day. Four major grievances were cited as reasons for the walkout: 1) low per pupil expenditures for education, 2) large class size, 3) shortage of textbooks and supplies, and 4) low teacher salaries.

The \$175 million is intended to directly address these issues. More than \$81 million goes to permanently increasing the equalized funding unit for public education in Utah (the Weighted Pupil Unit — WPU) by \$106 per pupil. The funding included a projected six percent raise for teachers. In addition, \$15 million for education technology, \$10 million for public school textbooks, \$3 million for school media centers, and \$3.7 million for college library acquisitions. The cost of reducing the average class enrollment size of twenty-three, by even one or two students, is so expensive that this issue has received limited funding support.

Even if Utah continues to prosper and student enrollments decline in the future, there are several reasons to believe that funding levels for education will not significantly improve. First, Utah's schools are not the only social services to operate in Utah. Future surpluses are likely to be directed to

other social programs and not education. Second, reduced enrollments may hold fiscal relief in future years, but for the present, Utah must graduate large classes through 12 years of increasingly expensive education as they progress through high school. Third, even if Utah's economy continues to prosper, it would take enormous revenues to bring Utah's per pupil expenditure level up to national averages. What do these relatively low per pupil expenditures mean for the quality of education in Utah?

The Quality of Education in Utah

In Utah, the Superintendent's Annual Report defines the improving quality of education by identifying specific programs or policies, such as a state-mandated core curriculum, increased graduation requirements, and teacher career ladders, all of which are used to measure the effect of district assessment programs (district report cards), student indicators (quality indicators), and student achievement tests, to name a few. Comparisons of these indicators claim that Utah's educational system is operating successfully. For example, the Annual Superintendent's Report emphasizes that results for 1988 from the American College Testing Program (ACT) taken by over 15,000 Utah students shows that student performance was higher than the nation in English, natural sciences, and social studies, but lower in mathematics.

Underlying these propositions about the quality of education is the position that schools in Utah are cost-effective. In Utah, schools operate successfully and inexpensively because of economies of scale. Over 82 percent of Utah students are enrolled in school districts with more than 10,000 pupils (less than four percent of the students are enrolled in school districts with fewer than 2500 pupils). Large classroom enrollments and low teacher salaries reduce expenditures and challenge the assumption that small classrooms and high teacher salaries are necessary for student achievement. In addition, Utah's public schools operate in a comparatively homogeneous population that values education. These factors help explain why student achievement is high even though per

pupil expenditures are comparatively low.

However, maintaining a low per pupil investment in education is not the same as operating cost-effectively. Policymakers will need to develop analytic strategies as well as data bases to help them make better decisions concerning productivity issues. For example, the introduction of year-round schools may help facilities to be more cost effective, but it would be necessary to compare the maintenance and usage of the traditional schedule with the extended-year schedules to know this for certain.

Equal Educational Opportunity

Utah's public schools are financed by a minimum provision philosophy. In the early 1970s, the school finance formula was extensively rewritten, emphasizing the state's role in the equalization of revenues for students among school districts. This plan required that revenues raised by school districts from a state-mandated minimum property tax be equalized, using state funds, to a specific level, thus ensuring students a minimum basic education. Utah has maintained its contribution to educational finance over the years, and even compensated for a declining Federal share during the fiscally constrained 1980s. For example, in 1965, local Utah governments contributed 47 percent to education, while the state contributed 46 percent, and the federal government seven percent. In 1989, the contribution by local government had decreased to 38 percent, while the state's contribution increased to 55 percent and the federal stayed approximately the same (6.7 percent).

Utah seeks to reduce the variation in per pupil expenditures among its forty school districts. School districts are able to raise money above the minimum foundation tax rate, although the state does recapture revenues generated by the minimum tax rate that are above the minimum expenditure level, by passing special voted leeways (taxes). Consequently, per pupil expenditures for Current Expenditures (instructional and maintenance) varied, in 1988, from a minimum of \$2,135 to a maximum of \$5,595.

Examining expenditure variations among school districts does not directly address how the tax burden has changed over the years. During the late 1970s and early 1980s, taxes in Utah decreased significantly. This is due in part to the presence of a strong tax-limitation group. Yet, even though tax rates increased during the remainder of the 1980s, these increases fell mostly on the property poor school districts. It appears that a district's wealth is related to the distribution of the tax burden among Utah's tax payers and can pose a serious equity issue in the future.

This systematic relationship between school district property wealth and per pupil expenditure levels is one of the persistent problems of school finance. The problem is fundamentally two-fold: yields from tax rates depend on the wealth of a school district; consequently, a student's access to the revenues necessary to purchase educational services depends upon their residence. State finance plans are intended to break, or at least mitigate, this relationship between school district wealth and educational opportunity by equalizing revenues by school districts.

The Utah's State Education Office is making a serious effort to accomplish an equitable school finance plan. Yet, per pupil expenditure differences still exist. However, even though Utah has not been able to improve measures of equal educational opportunity during the fiscally constrained 1980s, the picture did not significantly worsen either.

Conclusion

Utah cannot expect a significant increase in expenditure levels in the foreseeable future, despite a strengthening economy and reduction in the population growth. While the importance of productivity and cost effectiveness began to be addressed during the 1980s, policymakers need to continue to focus on these issues and others during the 1990s.

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